

for abdominal aortic aneurysm. 14.3% of patients had ankle-brachial pressure indexes (ABPI) carried out. 11.4% of GP were not confident of making the diagnosis, 20% of GPs were not able to or did not institute best medical treatment (BMT) in the community. 20% of patients referred had symptoms limiting lifestyle.

**Conclusions:** We are not meeting the minimum requirements for clinical examination and ABPI measurements. This could be because GP's often do not feel confident to diagnose IC and we can speculate as to whether education or increasing secondary care provision would be most appropriate.

#### 0144: LAPAROSCOPIC/LAPAROSCOPIC-ASSISTED ABDOMINAL AORTIC ANEURYSM (AAA) REPAIR IS ASSOCIATED WITH LESS POST-OPERATIVE PAIN, FEWER POST-OPERATIVE COMPLICATIONS AND A QUICKER RETURN TO NORMAL FUNCTION THAN OPEN AAA REPAIR

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**Introduction:** To compare patient outcomes between laparoscopic/ laparoscopic assisted (LR) and open repair (OR) of AAA in subjects in whom endovascular repair was inappropriate.

**Methods:** All patients undergoing either LR or OR since 2007 were included. Demographics, operative details and patient outcomes were prospectively recorded.

**Results:** 104 patients were investigated (51 LR; 53 OR, median age 72[66-75] years, 92.3% male). The 2 groups had equivalent ages, sex distribution and V-POSSUM scores. LR procedures had longer aortic clamp times and longer operation times than OR ([90[63-120] vs. 76[57-105] minutes,  $p=0.048$ ) and (330[270-390] vs. 240[180-300] minutes,  $p<0.0001$ ) respectively. OR patients were more likely to have an epidural for 3 days than LR (82.4 vs.20%,  $p<0.0001$ ). Post-operative pain was equivalent for LR and OR at days 1 and 3 and at days 5 and 7 LR reported less pain than OR ( $p=0.0006$  and  $p=0.0134$  respectively). LR patients started drinking, eating and mobilising quicker than OR (all  $p\leq 0.0001$ ), had fewer post-operative complications ( $p=0.017$ ) and were discharged sooner (5[3-7] vs. 8[6-11] days,  $p<0.0001$ ).

**Conclusions:** LR procedures took longer than OR but were associated with less post-operative pain, fewer post-operative complications and a quicker return to normal function and discharge from hospital than OR.

#### 0157: THE LOW INCIDENCE OF MAJOR LOWER LIMB AMPUTATION IN A POPULATION CHARACTERISED BY HIGH SOUTH ASIAN/HIGH DIABETIC PREVALENCE

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**Introduction:** To investigate the incidence of major lower limb amputation (MLLA) in a population characterised by very high diabetes prevalence and South Asian origin.

**Methods:** Data was prospectively collected for consecutive MLLA at a tertiary vascular centre over 2 years, and their clinical pathways examined via retrospective case notes analysis.

**Results:** 100 MLLA were performed over the 2 years. Our catchment area has a high South Asian population (34%) with very high diabetes prevalence within this group (52.8%), yet only 11% of amputations were performed in this ethnic group. The MLLA rate for diabetics alone was 0.55/1000 compared to the national average for all patients of 1.0. This is significantly lower than the expected incidence in our area of 1.0-1.2 per 1000 once adjusted for diabetes prevalence.

**Conclusions:** Although our catchment area has high levels of diabetes, especially in the large South Asian population, the MLLA incidence is low. In comparison, our area has significantly higher than national average mortality related to smoking and heart disease. However the South Asian cohort within our population is significantly younger than the Caucasian group. This may account for the difference and may indicate a higher future burden of peripheral vascular disease in this population to come.

#### 0162: PROSPECTIVE OBSERVATIONAL SERIES TO EVALUATE THE EFFICACY OF THE GEKO™ NEUROMUSCULAR ELECTRICAL STIMULATION DEVICE TO PRODUCE MUSCLE CONTRACTION IN VASCULAR PATIENTS

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**Introduction:** Transcutaneous neuromuscular stimulation (TNS) can improve micro- and macro-circulatory flow in healthy volunteers. This suggests it may be beneficial in DVT prevention and flow augmentation in vascular patients. The geko™ is a neuromuscular stimulation device, which stimulates the common peroneal nerve. This study aimed to establish whether the device effectively stimulates visible muscle twitch and as such may augment flow in vascular patients.

**Methods:** A prospective observational series. Background information, clinical examination and neuropathy scores were performed. Following device application the presence of a response was recorded. Univariable and multivariable analyses were performed to compare responders with non-responders.

**Results:** 100 patients AAA (13%), claudication (57%), critical limb ischaemia (4%), post-op femoro-popliteal bypass graft (7%), post-angioplasty (1%), diabetic ulcers(8%), varicose veins(5%) and healthy volunteers(5%) were included. 66 males and 34 females, mean age 69years(SD 11). Univariable analysis identified neuropathy score  $>5$ ( $p<0.001$ ), smoking ( $p=0.044$ ), calf circumference  $\geq 35$ cm ( $p=0.046$ ) and diabetes ( $p=0.044$ ) as potential variables associated with non-response. Only calf circumference  $\geq 35$ cm (Odds ratio (OR) 5.774, 95%confidence interval (CI) 1.124-29.653;  $P=0.036$ ) and Neuropathy score  $>5$  (OR:17.831, 95%CI 2.713- 117.193;  $P=0.003$ ) remained significant on multivariable analysis.

**Conclusions:** Failure to respond to TNS devices may be predicted by greater calf circumference and neuropathy score of  $>5$ . Identifying such patients can save time and prove cost-effective.

#### 0177: IMPROVING ACUTE VASCULAR ADMISSIONS AT A TERTIARY REFERRAL CENTRE BY IDENTIFYING AND QUANTIFYING DELAYS IN PATIENT CARE

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**Introduction:** 1. To identify delays in surgical and interventional radiology (IR) procedures for acute vascular patients in a regional vascular centre. 2. To quantify these delays based on NCEPOD guidelines (NCEPOD recommendations - <http://www.ncepod.org.uk/pdf/NCEPODRecommendations.pdf>) 3. To make appropriate recommendations to improve the care pathway of these patients

**Methods:** The audit was carried out over a period of one calendar month. All acute vascular patients requiring a definitive radiological or surgical intervention were included. Time of decision to intervene and time of intervention were recorded for each patient.

**Results:** 26 patients were included. Average time from decision to treat surgically to surgical intervention was 23 hours and 3 minutes and for IR was 52 hours and 33 minutes. The longest wait recorded was 116 hours and 12 minutes (for an IR procedure over a 4 day bank holiday weekend)

**Conclusions:** This audit identified significant delays in definitive treatment for some patients due to shared CEPOD lists and limited availability of IR services. These findings highlight some of the challenges that regional centres face when an increase in service demand precedes the required expansion of services. Recommendation for additional IR sessions and a dedicated vascular CEPOD list were made.

#### 0195: SYSTEMIC INFLAMMATORY RESPONSE SYNDROME SCORE MAY INDICATE INCREASED RISK OF MAJOR AMPUTATION IN PATIENTS WITH DIABETIC FOOT INFECTION

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**Introduction:** To explore the utility of the Systemic Inflammatory Response Syndrome (SIRS) score for indicating the risk of surgical intervention to treat infection in patients admitted with diabetic foot infection (DFI).

**Methods:** Clinical records of all patients with DFI admitted to our institution over a one-year period were analysed. The worst SIRS score in the first 24 hours of admission was calculated and patients stratified into two groups: SIRS positive (a score of two or more) and SIRS negative (a score less than two). Any surgical intervention to treat infection was recorded. This included debridement, drainage of abscess, and minor and major amputations.

**Results:** Ninety-seven patients were admitted with DFI. The SIRS positive group comprised 38 patients. The two groups were well matched for age, gender and co-morbidities. In both the SIRS positive and SIRS negative